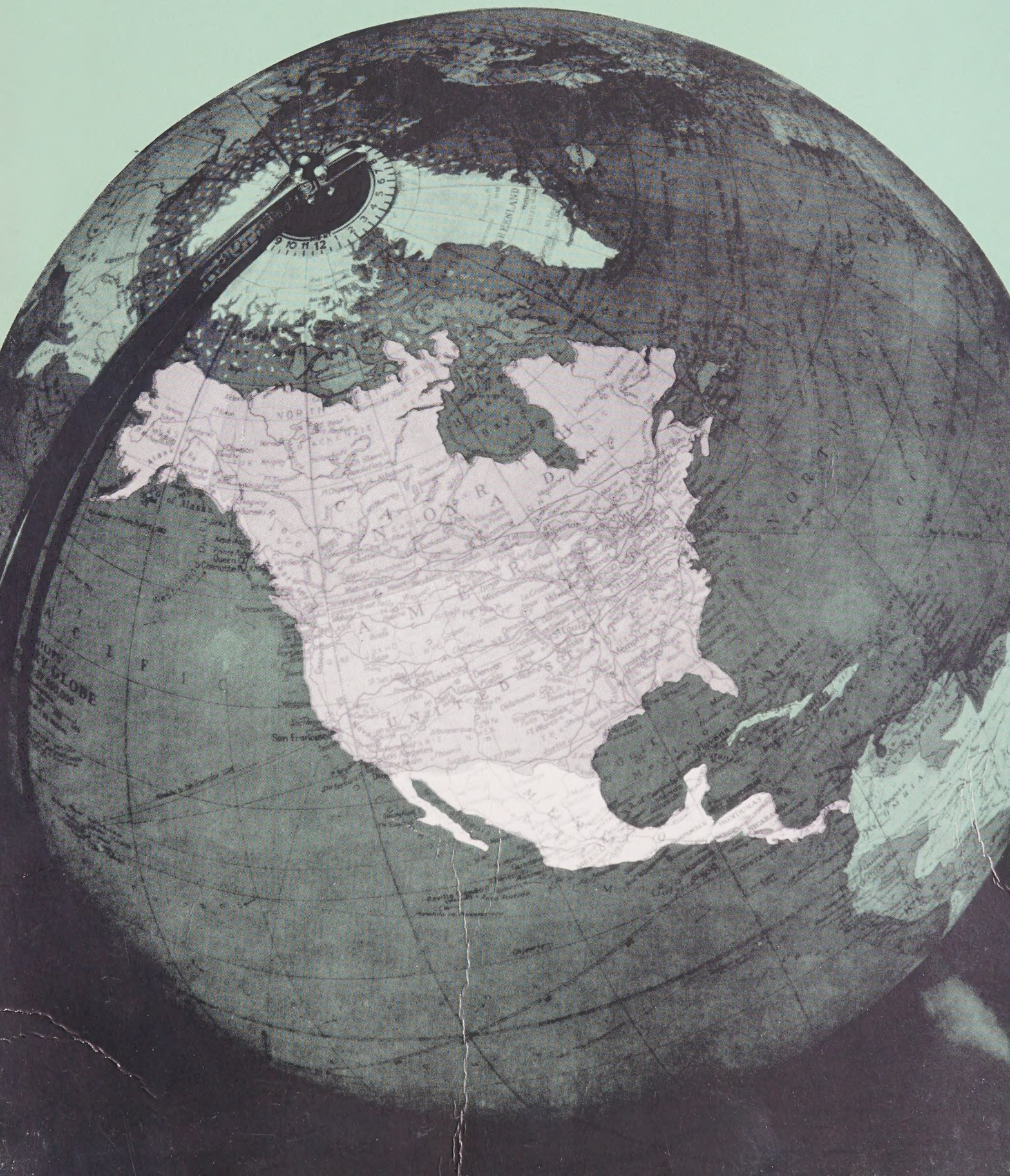




Bowaters in North America



An aerial photograph of an industrial facility, possibly a refinery or chemical plant, with various storage tanks, pipes, and structures. Overlaid on the image is a large, semi-transparent classical building with four columns and a pediment. The text is centered over the building's columns.

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Bowaters in North America

‘This great concept . . .’

‘Our determination was to establish ourselves as manufacturers in the United States, as we had in Canada, and to build up, around the hard core of a newsprint mill, the counterpart in this country (the United States) of The Bowater Paper Corporation, the parent company of the Bowater Organisation.

‘I am bold enough to say that the ceremony you have witnessed can be regarded as the unveiling of the keystone of this great concept.’

Spoken on October 9th, 1954, by Sir Eric Vansittart Bowater at the opening of the Tennessee Mills at Calhoun, East Tennessee, U.S.A.



The occasion for this booklet

is the opening of a new

sulphate pulp mill by

Bowaters Carolina Corporation

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The opening of a new pulp mill in South Carolina—latest in a series of Bowater enterprises in North America—brings a new industry to an area rich in tradition, robust in human resource.

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Bowaters' pulp and paper mill in Tennessee, already after only five years operation the largest-capacity newsprint mill in America, is a landmark of modern industrial progress in the South.

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Corner Brook, in Canada's island Province of Newfoundland, is a town set round a papermill. The mill is Bowaters', and Corner Brook is the true ancestor of all Bowaters' North American fortunes.

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The Organisation holds cutting rights over 11,000 square miles of Newfoundland forest, where, as in the South, wood harvesting and conservation are vital elements in the pattern of operations.

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Not even hurricanes dismay Nova Scotians, whose stable temper and patient craftsmanship are reflected in the woods operations and paper-making of Bowaters' Mersey Paper Company, the Province's biggest industry.

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From an office on New York's Park Avenue (but rarely in it) Bowater men sell nearly a million tons of newsprint a year in North America—much of it carried in Bowaters' own ships.

Page 45 **A world organisation**

Bowaters in North America is a part of Bowaters in the world—in the Old World as well as in the New, in many diverse undertakings, all motivated by a common purpose and plan.

Written by ROBERT SINCLAIR

Designed by PETER J. DIXON, M.S.I.A. *Publicity Department The Bowater Organisation* *

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In the summer

In the summer the swallows swing in from the lake in Nova Scotia, straight over the screaming circular saws that are cutting up the logs. The birds tend their young in the careful nests they have built on rafters that support the sawmill roof, only four or five feet from the roar and bustle of men, logs and saws. It is the peak of the wood-handling season.

In the fall

In the fall the seedlings are lifted from the woodland nursery in Tennessee, and carried by Bowater trucks—they bear the swallow-like sign of the flying 'B'—to many parts of the Southern States. There, carefully tended, they will grow into fine trees in the once fertile soil of North Mississippi, on the slopes of Tennessee, in the Piedmont plateau that spans the Carolinas, in Georgia and Alabama.

In the winter

In the winter the loggers of Newfoundland, men from Port aux Basques in the old French-settled south, from Placentia Bay where Franklin D. Roosevelt and Winston Churchill signed the Atlantic Charter, men from the upland haunts of the shy moose and from the abundant fishing grounds of the adjacent ocean—all those gather with their power-saws to try to extend felling far into the winter, part of a plan for more efficient wood production.

And in the spring

And in the spring the last touches will be put to a new Bowater plant near the border of the two Carolinas. This time the new life is not that of a bird, a seed or a forest, but of a new-born industry—the making of board from hardwood trees for the vast furniture-making district of the south-eastern United States. Yet this is but a small part of a grand design—the ambitious new woodpulp plant at Catawba opened in the late summer of 1959.

In each of the four seasons, at each of the four production centres of the Bowater Organisation in North America, something new is happening. New life is given to industry, new wealth to the world, new sap rises in trees which men have fostered in denuded soil, a new ship sails off to a new port with new-made paper on which men will print news.

What is the position of Bowaters, originally a purely English firm, in the North American pulp and paper world? A cluster of large Bowater plants now ranges from Newfoundland to Tennessee, the firm's wood operations stretch from Labrador to Mississippi, and research has seen its teams at work as far apart as South Carolina and Oregon. The answer to the question is that this fruitfulness is North American and regional; it represents the vigour of a State or Province. The man on the job can nearly always say, "Yes, I'm a local boy."

For Bowaters is, in the broadest sense, a business concept shared by teams of energetic men. North America's great welcome to that concept caused North American teams to grow and prosper. And in its local sense, it is men, bricks, machines, woodstacks, wealth.

In McMinn County, Tennessee, it is the biggest newsprint plant in the United States, and the biggest British-financed venture to be established in America in twenty years.

In Corner Brook it is a pulp and paper mill—one of the world's largest—which has created Newfoundland's second city, and which launched Bowaters into the heart of the American continent.

In the Carolinas it is a handsome new pulp mill in open land on a strategic water, rail and highway crossing, a pledge to the future.

In Liverpool Bay, Nova Scotia, it is a thirty-year-old newsprint industry, remarkable for its economic efficiency and its long history as supplier of the great New York and Washington newspapers.

In New York and Atlanta it is a poised sales organisation which exists to serve the customer and which has probably borne the heaviest task in establishing Bowaters in North America.

In Montreal it is the financial and administrative headquarters of North American activities.

The common factor in all these enterprises is perhaps the belief that a successful local industry is the most healthy human activity, the most economic form of contribution to man's wealth and welfare, and therefore the best investment in a growing world.



It went seed in the old cotton

In the South, the Bowater enterprises have grown from good local roots just as truly as the millions of trees that surround the busy mills. The industrial seed came from far away—first from England to Newfoundland, then from Newfoundland to Tennessee, from Tennessee to South Carolina. But the soil, the growth, the food of the growing industrial plants—all these are as native to the South as the fireflies around Athens courthouse or the roaring bullfrogs of the Ocoee dam.

There is a river rather longer than England running through one coastal corner of the United States. For a long way after its rise in the Blue Ridge Mountains it is called the Catawba River, but lower down it has other Indian names. It is brown, broad and turbulent, and as, at one point in the South Carolina uplands, it comes out of a long tunnel of green foliage, with trees on both sides dipping their branches into the water as they must have done in Columbus's day, there is suddenly a vast clearing, where men with axes long ago created fields and farmlands to add another few acres to America. And here, today, an even newer America has suddenly flowered.

A light aircraft comes down out of the sky, and a group of figures moves from the airstrip with the gait of men who are at home. They are Bowater engineers dropping in for a day's work on the new Catawba pulpmill: they have flown, as they did yesterday and the day before, from another millsite airstrip in Tennessee, two hundred and fifteen miles away, a journey that would have taken two months by covered wagon in the youth of old people at Catawba.

In the blazing sunlight the new mill has an odd monumental beauty, all the greater because it was not built to impress but for hard use. The upper third of the tall chimney glows with bright crimson paint, to comply with air traffic laws. Some of the soaring mill walls are a pale translucent green, light material designed for easy moving

when the mill grows. The result has the strange and challenging harmony of an Aztec temple, appropriate enough at ninety-five degrees in the shade, offset by nature's strongest hues where a plain of fiery copper-coloured earth is ringed by the intense green of the valley's vegetation.

A mile away from this uplifting view and over a wooded ridge there is a less arresting Carolina, a place of cherished habits yet modern amenities, of deep tradition yet enjoyment of new ways. For Bowaters has brought its new enterprise to a place rich in American striving. This was one of the original States of the Union, and the history of many generations is everywhere evident.

The human thread is strong in this valley. Many people here grew up in the old century—the century in which America herself grew from a sapling into a great tree. Their historic memory is robust. “The river bank gets flooded sometimes,” a farmer's wife will tell you, “but it saved this farm from Sherman's army; they couldn't get across.” From the same bank an old wooden raft, worked by a silent Indian, makes its last ferry crossing. A new road bridge runs overhead, built in time for the mill opening.

Neither bridge nor industry comes to these parts without the co-operation of the local people. Take the Lineburgers. In 1881 Farmer Lineburger bought from a neighbour some land by the river bank. There was no railroad; horse and mule were the only link between half a dozen families and the rest of the world. The Lineburger land was tended and gave a prosperous yield. Seventy-five years later Farmer Lineburger's son, after a healthy life on the same land, decided to sell his acres to the young American engineers from Tennessee who came to him with the Bowater mill plan.

This Farmer Lineburger, tall and ruddy and full of the memories of his own seventy years, sits before his new house a mile or so from the old site, and discusses the Bowater mill in which he shows a paternal interest. It was his land: he was free to sell or not. He recalls the day, more than half a century ago, when Sep Massey,

Occupying 1,300 acres alongside the broad Catawba river, well served by road, rail and water transport lines and drawing on the dense woodlands of three neighbouring States for raw materials, Bowaters' new \$38,000,000 sulphate pulp mill in South Carolina benefits from the operational experience already acquired by the Bowater pulp and paper mill in Tennessee, 215 miles away.



Recognising the value of this venture to the community, the Legislature of South Carolina passed a special measure enabling Bowaters to purchase local land.



father of one of his oldest friends, refused to sell forty acres close by for a textile plant.

The older Catawba people now think of those mule-and-buggy days with some affection but no envy. They see outside their own porch the group of gleaming family cars that will carry them in comfort to any part of the South, and they know that the march of America has left the small farm away back in the past. The movement of sons and daughters to the big cities, the low-cost farming now only possible to large agricultural units, the revolution in marketing—these are part of a world that came after Sep Massey's time, and a vastly better world for almost all Americans.

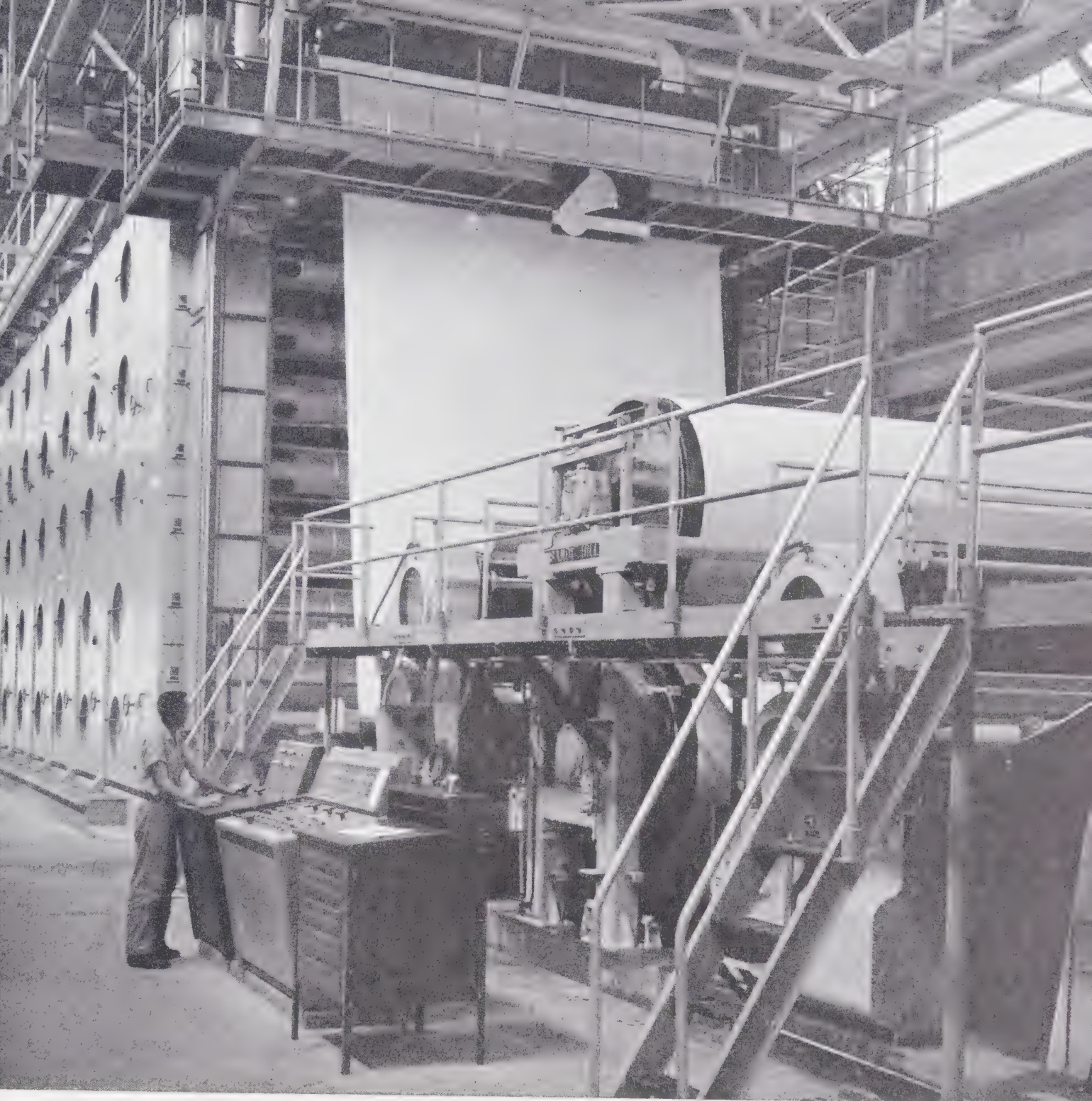
So Farmer Lineburger and his neighbours felt that a new seed should be planted at Catawba, and that the fruitful use of tree crops from thousands of Southern farms would bring gain to all. They were supported by the Legislature of South Carolina which passed a special law to enable the Bowaters Carolina Corporation, despite its links with Canadian and British companies, to buy land for the mill.

The newcomers to Catawba do not come as strangers. In this Southern spot they are mostly Southerners themselves. They do not need to explain or to learn: they belong. They are pulp men who were born and raised in the Carolinas, in Tennessee, Alabama, Georgia. And they have moved in from the slightly older Bowater mills in East Tennessee, where in five years there has been forged a happy union between the Bowater business and the Tennesseans.

The new mill's general manager is a reserved and hospitable Alabaman with a shy smile. The woods manager is a Georgian, a farmer's son with an intense interest in the people, the land, the whole economy of the South. There is a vigorous young Southerner who graduated from college in industrial relations, and if you ask him why he joined Bowaters he will say "I wanted to marry a girl in Athens, Tennessee, and Bowaters was close by." Within a few years the promotion ladder had taken him, his young wife and family all the way from

Heart of the mill is this air-operated pulp dryer, unique in design in North America, and with the largest output of any such plant in the world. It can produce 448 lb. of dried baled pulp in under a minute.

Lime used in chemical pulp production is prepared in a vast rotary kiln as long as a football field.



Athens to Catawba. Many at the mill are from the Catawba valley itself, and some have lived all their lives at Rock Hill, eight miles away. There is the inevitable Canadian, with an inborn knowledge of pulpwood, whose children are now growing up as Southerners and rarely see snow.

All these men are very proud of their 134,000-tons-a-year plant. They are making sulphate (kraft) pulp, 400 tons a day of it, for sale to paper mills, and much of their output is shipped to Bowater newsprint mills in England.

The mill site has an air of assured ambition. Much of the wide expanse is empty but neatly levelled, so that the whole plant appears ready to expand if somebody shouts "Go!" Any worker will point to the temporary green walls and say to a visitor, "Why build brick walls to knock them down again?"

Plant and equipment show great simplicity and the now easily recognisable Bowater logic in planning. Everywhere there are strong and distinctive colours, and always for a good reason. Many of the large pipes, made of fibreglass, chemically inert and very strong, are semi-transparent and the sunlight strikes gaily through them. Mammoth steel containers and pressure vessels, such as a 60-ton silo, are coated in a mastic preparation of matt black, and these large black geometrical objects intensify the bright colours around. The mastic preserves steel and cuts out paint and its maintenance.

The pride of the mill is a revolutionary pulp dryer, which is unique in North America and which has the largest output in the world for a single dryer. This new machine dispenses with the conventional conveyor chains, and carries the fast-moving layer of fibrous pulp on a cushion of air, the actual steam-heated air which also dries it. A web of pulp one-third of a mile long is moving through the machine at any moment, passing to and fro seventeen times and being treated by 120 fans. The dryer, which is of Swedish design, produces a 448-pound bale of dried pulp, all ready for shipment, in less than a minute.

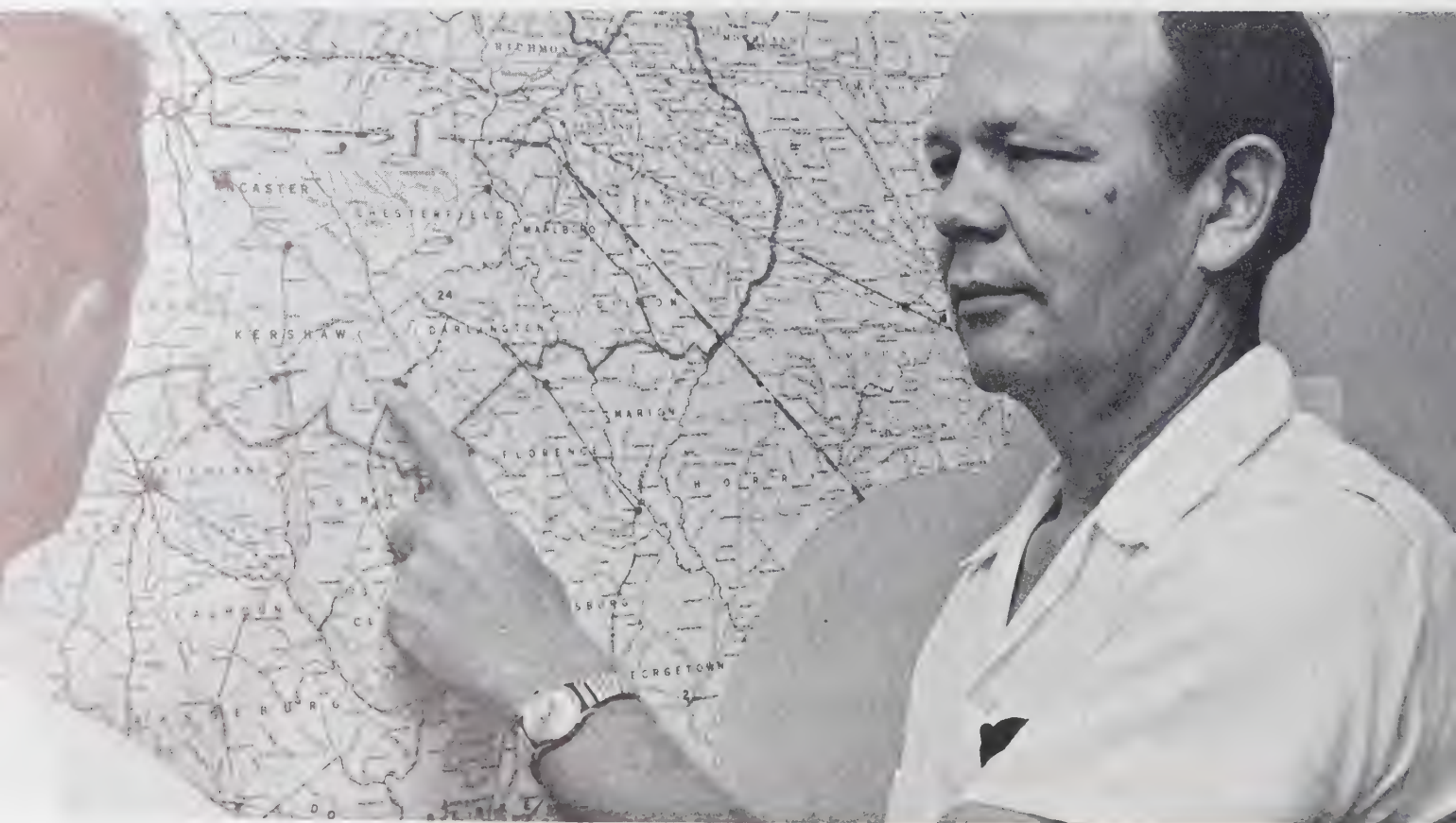
There are many aspects of economic efficiency. By-products such as crude turpentine and crude soap, of which 50,000 gallons a week are produced, emerge from the wood-fibre 'cooking' process, and are sold to the chemical industry and to soap manufacturers.

Bowaters' long-term economic thinking is seen in a smaller plant which is being built on the same site, and which shares power, heating and certain wood supplies with the pulp mill. This is a plant for the manufacture of wood panel products, and represents Bowaters' first North American movement towards diversified industry, a policy in which the organisation deeply believes, and which it has applied for many years elsewhere.

This new hardboard plant will specialise in grades of board designed for furniture manufacture and many other uses. One of the great furniture centres of the United States is in the South, serving the populous cities of the North-east, and the new mill will supply manufacturers with board smooth on both sides, made by special processes devised by Bowaters during prolonged tests.



The efficient, up-to-the-minute design of the whole mill is characterised by the louvred walls of the power-plant control room, which for ventilation in summer become giant venetian blinds at the touch of a button.



Nearing completion on the Catawba site is a new hardboard mill, initially designed to produce 160,000,000 square feet of board a year, particularly for use by the vast furniture industry of the South-eastern States. Like the pulp mill, the new plant will draw on local wood resources. Its exclusive use of hardwood provides Carolina farmers with a welcome new market—the operations map in the woods manager's office is a pledge of continuing local prosperity.

Perhaps the shrewdest investment made by the men who selected Catawba lies in the enormous wood resources. For a large radius there is no other plant requiring pulpwood. The average farm in this part of the Carolinas has half its land in woods, and the woodlands throughout the South are now producing at only half their potential capacity. The operations map in the woods manager's room at the new Carolina mill contains heartening promise.

It is through wood nurture and buying that the mill men enter a community's heart. For hundreds of square miles round Catawba they are in daily touch with the rich variety of Southern life. A little of the past lingers, like a faded tapestry, and fragments of the Old South are never far out of sight—a handful of unpicked cotton plants in a field, a coloured farm boy driving a mule-plough, an obsolete cotton 'gin' (a separating plant) used as tractor storage. Ten minutes away is one of the New South's pleasure-spots, the immense Catawba Lake with its water-ski-ing revels, ringed by the week-end homes of the prosperous citizens of Rock Hill. And in the next valley is a 2,000-acre peach farm, a sample of the New South's changed agriculture. A few miles away in the woods are the abandoned log cabins of an earlier America, standing like monuments defying time; generations of children have played on a porch where now only a lizard scurries.

The latter-day America is symbolised by the 8,000-dollar wheeled homes of aluminium in which construction workers and their families have lived during the building of the Carolina mills. Air-conditioned, televisioned, these gleaming homes nestle under trees in the fields, and while Mom operates the washer and Pop drives to work in his car the school bus takes the children to the brand new county school.

The Old South is being swiftly regenerated into a New World.





Bowaters on the great rivers

You will see eight horse-collars hanging on pegs if you follow the hospitable Walt Bolen into a back room of the Bolen brothers' store in Tennessee. "I guess they just didn't fit," says Walt, ruminating as they are pointed out to him. But the Bolen brothers believe in completeness of service, so they keep the old horse-collars, much as they keep a thousand kinds of modern goods which men, women and children want to wear, use or eat every day.

There is something that smacks of American simplicity and American strength which is very close to the technologically modern America of the South. Simple ways, austere beliefs, a pair of jeans—and air-conditioned motor-cars, luxurious homes and a demand for first-class service. The South, like the Bolen brothers, has everything.

Against this background Bowaters has come to the heart-land of the great rivers, the breeding-ground of the American people's abundant folk-lore. Here the largest inland waterways system in the world stretches from the Rockies to the Appalachians and from Chicago to the Gulf of Mexico. Into the Mississippi, the Father of Waters, run such legendary rivers as the Missouri, the Arkansas, the Illinois and the Ohio, joined by the winding Tennessee, and fed by a score of others—more than 12,000 miles of navigable channel, a veritable network of water, the cheapest and safest medium for paper transport.

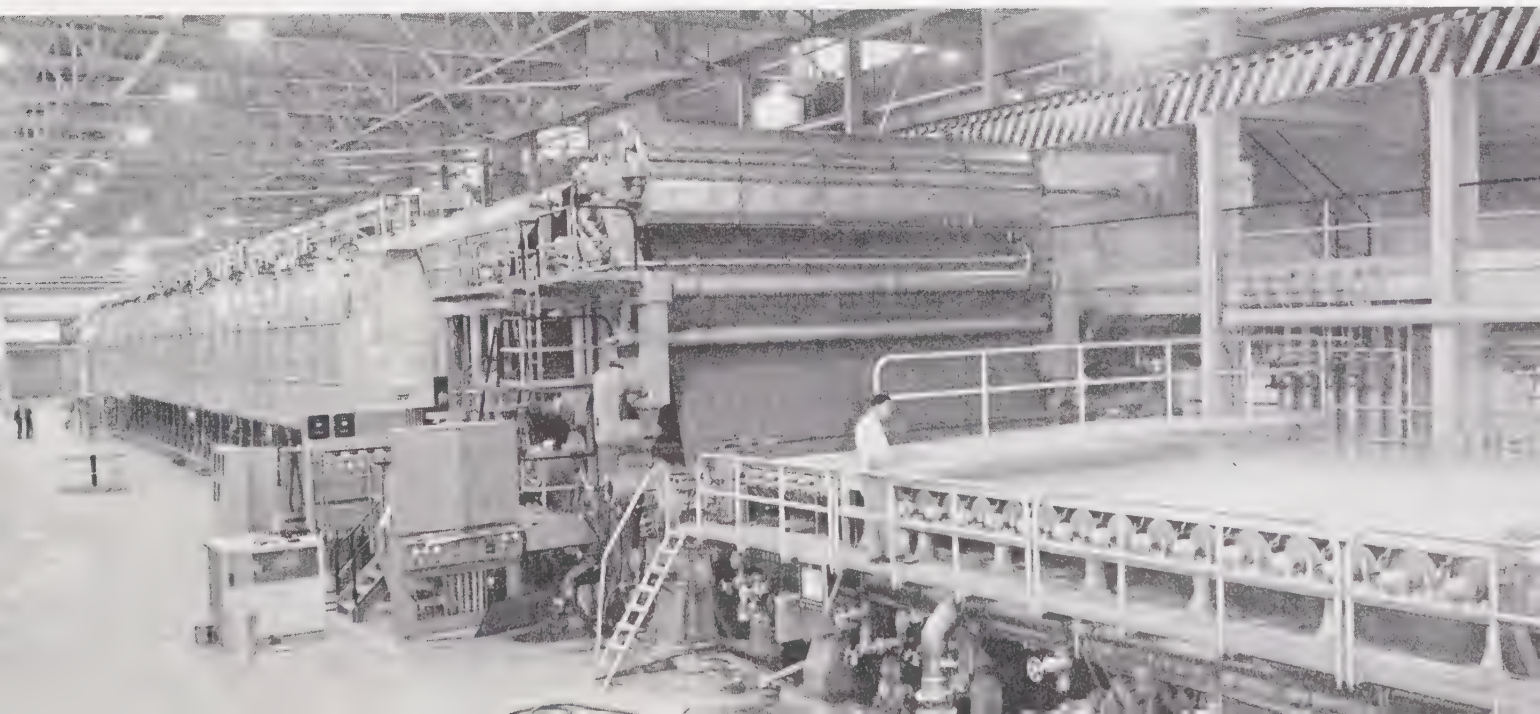
Less than a mile from the Bolen brothers' store, a few years ago, Bowaters built a pulp and newsprint mill. It is now the largest-capacity newsprint mill in the United States, but the intimate and small-scale nature of local life has not been harmed. The community is larger and wealthier, there are more people in it, yet personal habits and values have been preserved, and everyone still knows everyone else. The traditions of the Bible Belt are proudly maintained. The veteran Mr. Quisenberry, retired president and chief cashier of the local bank, but now its consultant and still a stock-

holder, greets his friends as usual as he walks from the bank in mid-morning. Miss 'Timmie' Bryant, post-mistress on one side of the river, jokes with friends in the store in which she has worked for 35 years. Mrs. McCamish ('Miz Pearl'), post-mistress on the other side, cheerfully tells you as she tidies her home that her annual stamp revenue has jumped from 1,500 dollars to 17,000 dollars since the new mill came. On the main street the old social life of the South goes on undisturbed: Mr. Jake Webb, the blacksmith who retired ten years ago, stands in the centre of a group. He used to repair ploughs and shoe horses, but now, in a world of mechanised ploughs and no horses, he watches the new wealth and activity that have come to the town.

The mill lies in a river bend in a charming valley of gentle, well-wooded slopes, with dairy herds as its neighbours, and its achievement is the source of a good deal of pride. In less than five operating years its capacity rose to 435,000 tons a year, and it now supplies more than 200 daily newspapers in 160 cities in nineteen States. Starting its career with two high-speed newsprint machines, it quickly expanded, and as its fourth machine came into action the millionth ton was produced. The machines have achieved world records for sustained production speeds of 2,300 feet a minute. The mill is famous all over the world: in its cafeteria you are liable to meet visiting technicians from Germany, Brazil, Pakistan and England.

With an output of 1,400 tons a day and an intake of a much heavier tonnage in logs, the transportation problem is paramount. The mill is sited at the intersection of a railroad, U.S. Highway 11 and the navigable Hiwassee River. Some 70,000 rail-cars, each carrying an average of 40 newsprint rolls or 255 bales of pulp, are handled in the plant every year. This is the equivalent of more than 200 rail-cars a day being switched in or out of the mill tracks.

Selected after intensive survey of all North America, the 1,800-acre site of Bowaters' Tennessee Mill is ideally located for pulpwood supplies, industrial services—and transport of newsprint to 19 American States. Now, with the recent commissioning of its fourth high-speed machine, the mill's annual newsprint capacity has risen from 130,000 tons in 1954 to 435,000 tons, making it the largest newsprint mill in North America.



Transportation, however, does not consist merely of dispatching freight. A Calhoun clerk defines the task of his department in five significant words: "We see it gets there."

Barge traffic is taking an ever-increasing share of the tonnage, and the mill dock from which Bowater products set out on trans-continental journeys has an outward trade of 50,000 tons of newsprint in a year. Low freight costs help competitive selling in the farther markets of the mid-west and south-west.

For the 1,600-miles journey to Houston (Texas) the barges are towed down the Hiwassee, into the Tennessee River, through Alabama and back north into Kentucky to meet the Ohio River, then along the border of the State of Illinois into Mississippi, and down 'Ol' Man River' to the deepest South and New Orleans, with a final run along the inter-coastal waterway system to Houston.

Incoming barges at the mill dock mainly carry logs, but cargoes of sawmill waste are becoming frequent, for the discarded lengths of wood which remain after a tree-trunk has been sawn into lumber are now chipped and pulped.

The Bowaters barging operations did not fully develop until the United States Congress amended in 1958 a forty-year-old law which had denied the ownership of barges and towing vessels to a company having non-American financial associations. This law so hindered Bowaters' trading services that Southern Congressmen in Washington, very strongly supported by numbers of Southern publishers, introduced and passed an amending law, which the Senate unanimously approved.

The economy of the Tennessee enterprise, like that of South Carolina, is based on the fast-growing southern pine, which matures in twenty-five years, three times as fast as northern spruce and fir. The resinous nature of the pine is, thanks to the historic research launched by Dr. Charles Herty, no longer an obstacle to its use for newsprint. As a result, the new mill has brought a heightened prosperity to growers of wood over large areas.

The job of supplying this wood is the woods manager's. At the Tennessee mill he has the woodlands of six States to draw on, and four to five hundred people in his direct employ, controlled by nine district forestry offices. Bowaters owns many square miles of woodland, mainly young trees, but at the moment it buys most of its wood from farmers or other landowners.

The wood comes in every way. Local wood comes by truck. From farther away, barges bring cargoes collected at Bowater barging points along rivers. Where water haulage is not possible, logs arrive by rail on long trains of flat cars.

The quick-growing trees of the South are regarded as a crop, which is planted, tended and harvested in a methodical way. Bowaters has given a great impulse to the Tree Farm movement, which encourages farmers to make the best use of land fit for wood growth.

For some years the Tennessee mill's woods department has main-

*Bowaters' own fleet of barges
carries 50,000 tons of
newsprint a year to cities linked
by the largest inland
waterways system in the world.*



tained a tree nursery in which millions of seeds are planted every spring and millions of healthy seedlings are lifted later in the year. Each group of seeds comes from a known soil, and the resulting seedlings are transported in a refrigerated van for planting in their parent soil and climate—which may be 250 miles away.

Softwoods alone have been used for papermaking for many years, but hardwood is now becoming widely used in pulp-mills. A pilot plant at the Tennessee mill was so successful that permanent hardwood pulping plant was built there, and a proportion of hardwood now goes into the newsprint pulp. Besides adding strength to the pulp, this helps forestry economics.

When, a few years ago, it was learned that Bowaters proposed to build in Tennessee, there was a hearty welcome. At first materials were scarce owing to the Korean War; this difficulty was overcome after thousands of people had petitioned for the mill and hundreds of Southern publishers had pressed for its rapid building. Soon there were long lists of applicants for jobs.


Local hopes were not disappointed. In 1958 the gross payroll of Bowaters' Tennessee employees was \$8,700,000, and \$12,000,000 paid for wood included \$1,850,000 to railroad and barge lines. Gross sales brought in nearly a million dollars a week, and all trading profits went to pay back American money lent to help build the mill.

Local life has been transformed. The mill was built in Calhoun, one of two small farming communities that faced one another across the river. Now Calhoun and its neighbour Charleston have grown together and expanded.

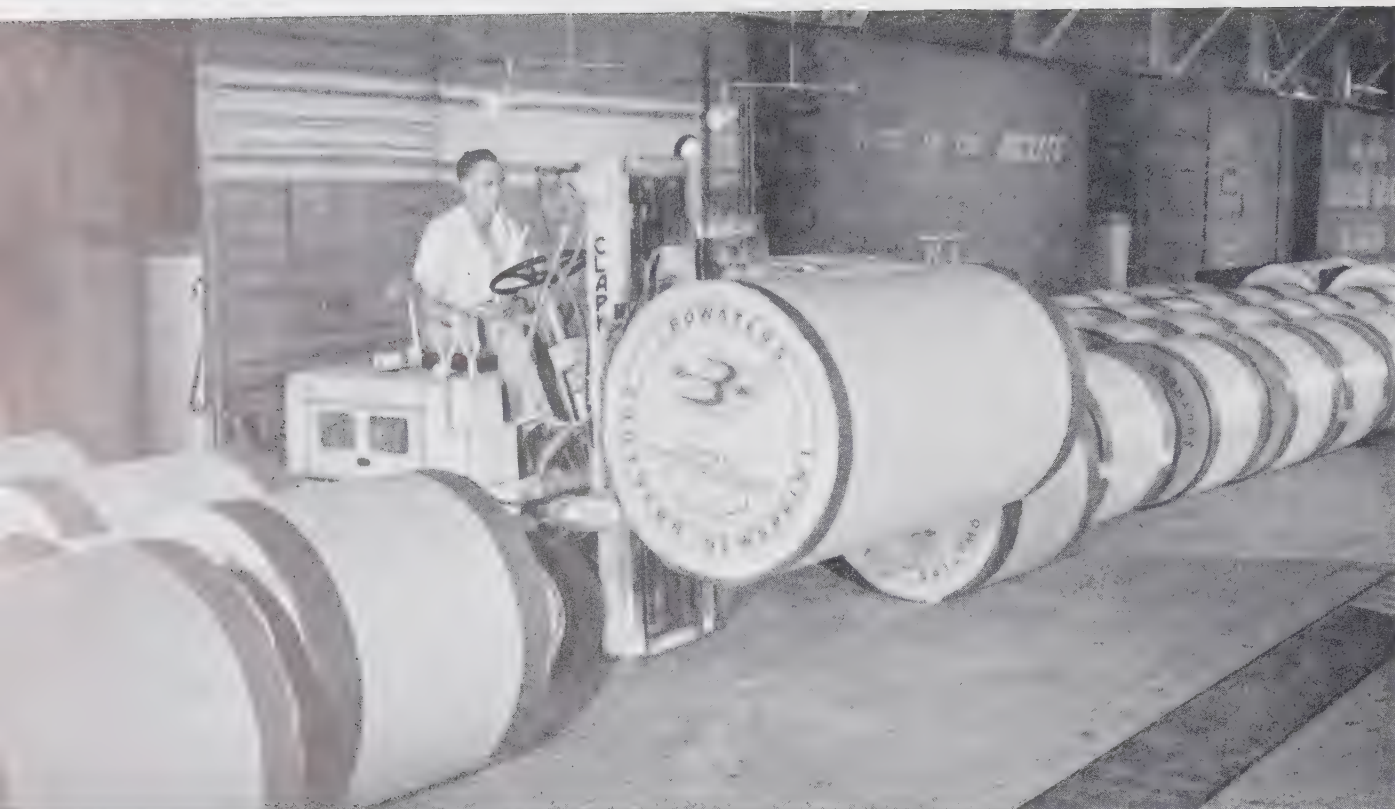
More than 200 new families, mostly from Southern States, have set up homes there, while many others live farther out. A city commission in Charleston has improved streets, installed street lighting,

Millions of seedlings raised in Bowaters' own nursery are mechanically planted yearly (1) to ensure future supplies. Trees, which mature for harvesting in only 7 years, are cut by local farmers (2) and delivered to the mill (3). Other wood supplies come in by rail and water (4).





Spectacle matches enterprise in this 500-foot diameter log storage pond at Calhoun, specially designed by Bowaters for 'keeping' wood which would lose condition if stored above ground.



Day and night, rail cars are moving in and out of the Tennessee mill area. They carry the main bulk of a vast tonnage of Bowater newsprint earmarked for the press of over 200 newspapers in 160 American cities.

The quick-growing Southern pine has become a marketable crop for local farmers and land owners. Efficient methods of cultivation have been furthered by the establishment of a Bowaters tree nursery, which not only supplies healthy seedlings for transplanting but gives valuable advice on forestry.



developed a park, erected traffic control signals, and provided police and fire departments. A new water system was early established for Calhoun and Charleston, financially assisted by a Bowater guarantee, and new high schools have been built. In four years property value has more than doubled.

Business and farming people find that a large newsprint plant is an incentive to capitalise and maintain farms, buy instruments, and buy more land. As well as providing employment and wages for displaced farm labour and for off-season labour, it turns waste land to productive use, and brings new business to banks and implement dealers.

East Tennessee has long emerged from earlier hard times. The falling rural population reached its lowest point thirty years ago, before pulp and paper mills came to the South. Today the main agricultural activities are dairy herds, beef cattle, tobacco, and broiler raising; industry includes textiles, farm implements, furniture.

Material gain has its humane consequences, and Calhoun-Charleston has benefited in health by the great change. The old community had been loyally served. 'Miss Timmie' remembers a devoted doctor who kept two span (pairs) of horses and two drivers for his buggy. He was always on the road, and slept during his night journeys. More recently, an equally devoted doctor died: he believed in service and, his friends say proudly, "didn't care whether people paid or not." His widow still lives in the town.

But there was a gap when there was no doctor. With the coming of Bowaters and the new population, a commercial centre was built which included a doctor's clinic. Today Doctor Weir is installed, serving an area with some 5,000 people, and the modern prosperous patient, not waiting for a doctor's buggy, drives in to the well-equipped modern clinic.

There is not only utility but graciousness. At the desk in the outer office sits Mrs. Murray, the receptionist, behind an elegantly curving avocado plant. "I just planted a stone I found on the doctor's plate," she explains with a smile.





The sylvan island

If you meet a moose at midnight on the lonely gravelled road near Pinchgut Lake—the only public road running down the west coast of Newfoundland—and he moves obligingly out of your headlights into the roadside forest, you are reminded that man has controlled but never conquered the interior of this vast island. Moose and herds of caribou roam the central parts, and sometimes hunger will drive a little bear to steal from a loggers' camp.

The experience helps the visitor to understand the physical character of one of the world's prime sources of pulpwood. It is broadly true to say that the inside of Newfoundland is all wood and no people. Almost five-eighths of the land area is covered by productive forests. The island is nearly the size of England, with one-hundredth of England's population, and almost all that population disposed round the edge.⁶ The rocky coast is so indented by deep fjords and lesser inlets that there are 6,000 miles of it, and most of the people live by the salt water in 1,300 small fishing settlements bearing such names as Bumble Bee Bight, Nick's Nose Cove and Heart's Content. Inland, thousands of square miles are left to conifer forests and lakes.

This sylvan world is closely related to our story, for the true ancestor of all Bowaters' North American fortunes was a small but go-ahead community located on an isolated river-mouth in Newfoundland. Corner Brook is a town set round a papermill. It gets its name from the brook in the south corner of the Humber Arm. The mill has been Bowaters' for more than twenty years, and in their hands it has become one of the largest integrated pulp and paper plants in the world. Corner Brook has been made by the mill. It is now the second city in Newfoundland and a thriving industrial community.

The Corner Brook people share with the whole Canadian Province

of Newfoundland a sense of rugged directness and great personal independence. Newfoundlanders are proud of the history of their island and their people, which reaches back to 1497, when Cabot discovered England's earliest colony.

The streets of Corner Brook and the views from the surrounding hills show a city in transition. There is a wooden church in the centre, built in the nineteen-thirties, contrasting with a brick and concrete one farther out, built the other day, while on the edges of the town new residential sections are rapidly growing.

In the early days it was the mill which built or financed homes, stores, roads, docks, power supply, school, church, park, hotel, newspaper and laundry. But as soon as each amenity or service had been soundly established, Bowaters handed it over to others: the Corporation's business was to make paper and assist its employees with certain amenities, not to own a mill town. Good work has been done—by Bowaters, by the city authorities, by the Provincial Government—to attract other activities, and recent new plants represent the cement, gypsum, constructional, lumber and other industries.

The mills were acquired by the Bowater Organisation (which until then had not manufactured newsprint outside England) just before World War II. Their capacity and actual output were immediately increased, a large new sulphite pulp plant was built, and extensive cutting rights were granted by the Newfoundland Government in return for the economic benefits the whole island would derive from the industry and from the capital laid out by Bowaters. It was from Newfoundland that Bowaters built up a large market among United States publishers, including those in the South, and in the early nineteen-fifties the Organisation's Corner Brook and United Kingdom technicians, associated with its vigorous New York sales office, planned the Tennessee mills.

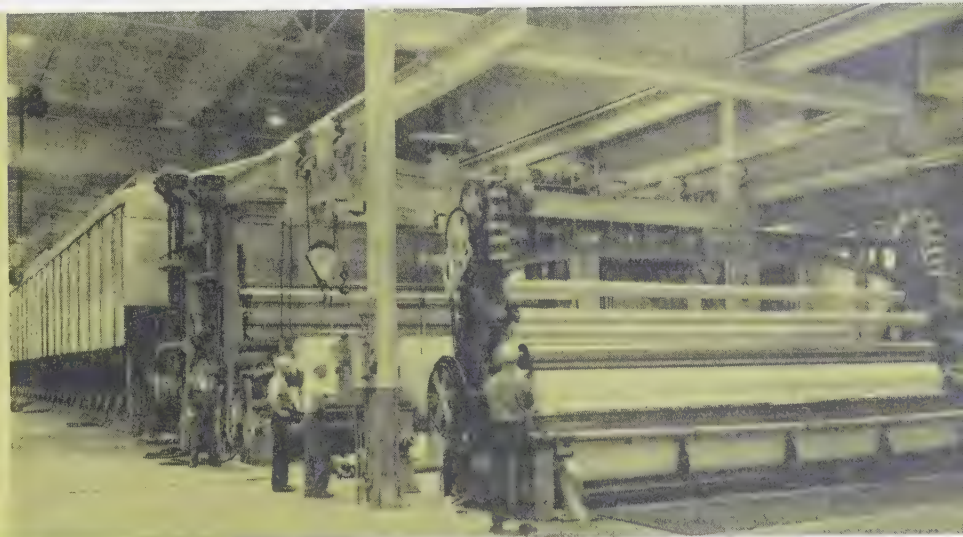
Today the plant at Corner Brook has a capacity of 350,000 tons a year, nine-tenths newsprint and the rest baled pulp for export. Not only have American newspaper publishers been the mill's main customers for many years, but heavy consignments of pulp and logs are also shipped to Bowater mills in England.

Corner Brook's ten great digesters cook chipped wood to make strong chemical pulp, while forty-one grinders literally grind whole logs into groundwood pulp, consuming 64,000 horse-power in this operation alone. Of the paper-making machines, the biggest, No. 7, produces nearly half a mile a minute of a 24-foot-wide web of newsprint—some 600 miles a day or more than 300 tons.

When the mill was first built its own hydro-electric power system had to be built too, and this has grown with the years. The Bowater Power Company today owns a 156,000-horse-power plant and a very new 12,000-horse-power fully automatic unit. The Bowater power system not only supplies the mill but other industries and public and private consumers in this part of Newfoundland, where the continuing pace of development is calling for new installations to generate more horse-power.



Corner Brook mill, fronting the harbour in the Humber River estuary on Newfoundland's western seaboard, is one of the world's largest integrated pulp and paper plants. Its No. 7 machine can produce 600 miles of 24-foot wide newsprint daily.





Bowaters in the woods

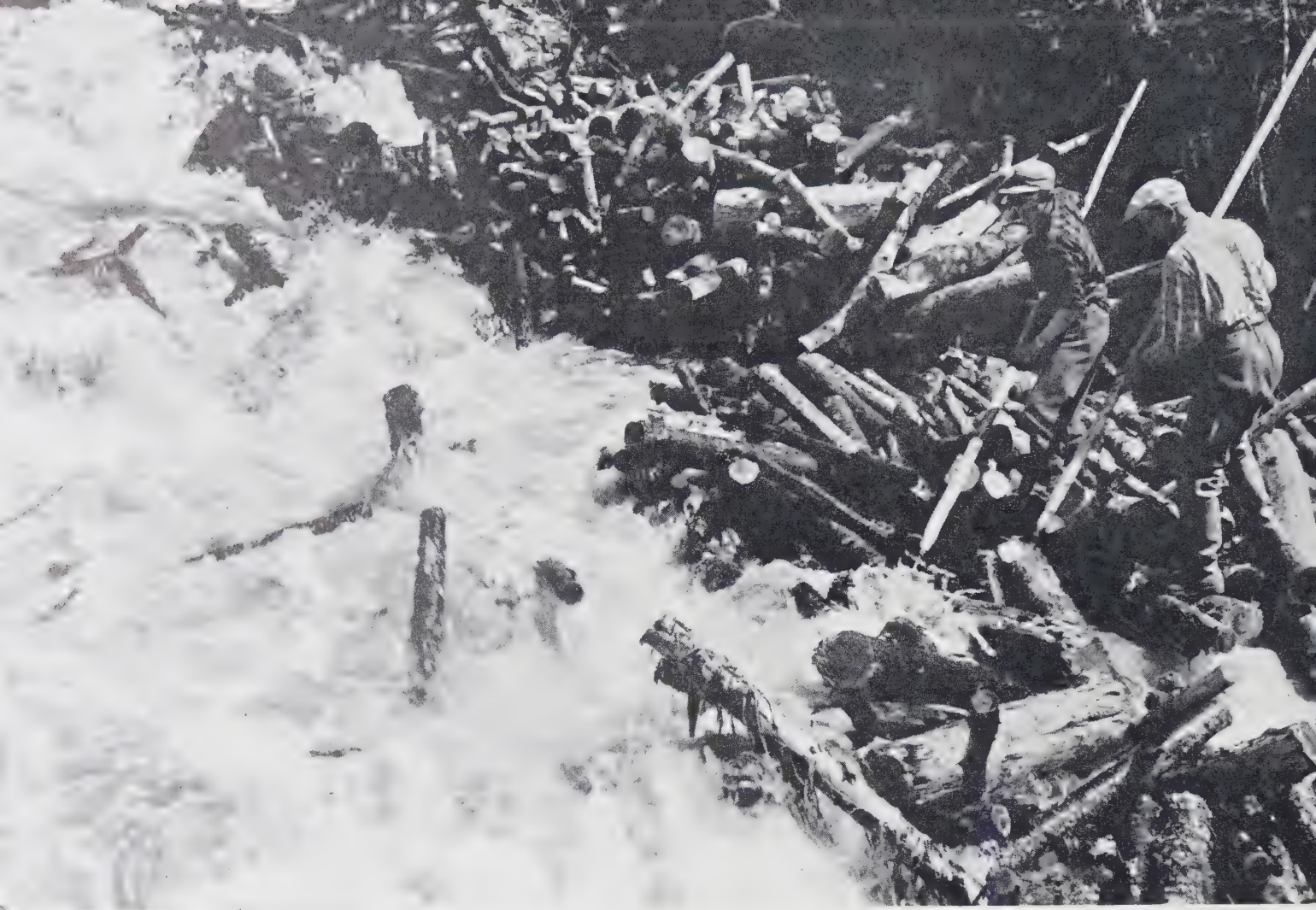
From early May the WHA-A-ANG WHA-A-ANG of the power-saw echoes in the Northern woods. Nearly four thousand tons of logs a day are wanted at the mills throughout the year, and most of it is cut in one short season.

Woods operations in Newfoundland are very different from those of Tennessee and the Carolinas. There is no buying of truckloads from this or that farmer. Bowaters simply plans the cutting of its own wood in its own forests. It holds cutting rights over 11,000 square miles, one-quarter of the whole area of Newfoundland, yielding sufficient wood to supply the Corner Brook mill indefinitely.

Many of the loggers are fishermen, who leave their boats for a season of the year to earn much bigger money in the logging camps, each man bringing his own power-saw. In camp they live in huts, preferably with log walls, which they find warmer. Some men spend three or four months in camp without going home, especially if this would mean a slow boat journey round the coast. Often the same men will join a camp in successive years, renewing old friendships.

The camps are run, the detailed work organised and the men hired and paid by contractors, each of whom knows his area and his men. Centralised employment of men spread over thousands of square miles would be impossible. The main cutting and hauling programme, however, is laid down by Bowaters, which decides which sections of forest shall be felled each year. Camps are often semi-permanent, and are used all round the year, for men are needed not only to fell the trees but to haul and 'drive' the logs.

The age-old seasonal cycle of the logger is being modified. It has been the practice to cut before the year's end, to haul logs over snow and ice before April, then to 'drive' the logs down the rivers during the spring thaw. This cycle, to which there was formerly no alternative, locked up millions of dollars in felled wood which could not



In spring, 'drivers' with steel-spiked poles work strenuously to keep the millions of logs moving freely downstream towards the holding booms.

At the mill, giant overhead stackers stockpile the logs to ensure an even rate of pulp production throughout the winter months when movement of pulpwood to the mill is held up.



reach the pulpmill for nearly a year. Today the bulldozer and grader enable roads to be made, power winches and tackle allow logs to be hauled without snow, and trucks will carry logs anywhere. Therefore winter felling is being developed in an attempt at economy, and so is sap-peeling (the stripping of bark by the logger when sap is abundant) to avoid a complex mill operation.

The bulk transport of logs to the mills involves planning on a major military scale. About a third of Corner Brook's wood comes by rail, a third floats down rivers to the mills, and a third—'boatwood'—comes in barges along the coast. In some years trains of barges have carried wood hundreds of miles from Labrador or, even farther, from the east coast of Newfoundland.

Side by side with cutting and hauling, roads and bridges have to be made and repaired and logging camps have to be built and moved. Bowaters has built some 800 miles of road, and adds a further fifty miles every year.

In these enormous Northern forests, planting by man is not the best way to preserve and renew the forest riches. Natural regeneration is therefore the universal policy of forestry officers in Newfoundland. In the homeland of spruce and balsam fir, nature does better than man, and the role of the woodsman is to guard the natural forest, to see that cutting is methodically planned in the best interests of continuing tree crops, to fight against pests, and to ensure that felled trees are always replaced by natural seeding.

Fire is the greatest cause of forest waste. In the dangerous dry season fire rapidly spreads when started, and if a strong wind is blowing thousands of acres may be in danger. When news of a serious fire is flashed to Bowaters' mills, the woods manager may set off by plane at any hour of the day or night to direct fire fighting operations. The mills, with other wood users and the Government, engage in planned fire protection, comprising watch towers, patrols, radio and telephone communications, and public education.





The tidy mill

In the top left-hand drawer of the office desk in the mill manager's room of a tidy papermill in Nova Scotia is a graph, with a runaway line showing a continually rising curve such as the comic papers depict when they wish to suggest impossible optimism. The deep industrial significance of this piece of paper is that its message is *true*. It is not a forecast but a record of past events—thirty years' continuous rise in production (except during war) in relation to available plant. It is taken out but rarely, and then only to remind the mill manager of the date of some past installation.

The tidy mill is that of Bowaters Mersey Paper Company overlooking the blue water of picturesque Liverpool Bay, down the coast from Halifax.

The Mersey mill enjoys a special position. It is the smallest newsprint unit in the Bowater Organisation. It is also the newest, for it joined the Bowater family just over three years ago, already mature and self-sufficient, and notable throughout the industry for its high efficiency. It is therefore not yet an example of the Bowater tradition but it illustrates the Bowater principle of occasionally enriching the organisation's bloodstream by adding a new and valued member to the family. Twenty-five years ago the great Kemsley mills in England came to Bowaters in this way. More than twenty years ago the Corner Brook mills were acquired. Now comes the Mersey mill, in the best of company.

The rising graph of production in the mill manager's drawer is an important clue to the mill's contribution to papermaking technology: it points to the unusual mental discipline, the patient craftsmanship, the unhurried but not unvigilant attention given to every screw in every machine. The mill is devoted to the principle of maintenance, and when they use the word they smile to show that in their view maintenance is a fine craft which calls for a fine engineer. Rightly or wrongly, they have not believed in buying gadgets or trying new tricks until other people have tested them and failed or succeeded. And they have got their machines to run at speeds hitherto considered impossible for their kind.

The mill's two machines have for many years supplied some of the world's most influential newspapers, including the *New York Times*, the *New York Herald-Tribune*, and the *Washington Post*. The 600 workers at the mill turn out 500 tons of newsprint a day, which are lifted from the mill's own dock into Bowaters' own ships. The mill's products go as far as the United Kingdom and New Zealand.

The Mersey Paper Company has readily settled down as part of the Bowater Organisation. New equipment has been installed which has further raised its capacity. Its president has lately been elected president of Bowaters' great Newfoundland mill and has also joined the Organisation's overall North American board. Last summer Bowater scientists, engineers and technicians from all over the world held a working conference near the Mersey mill, directly overlooking the broad Atlantic which symbolises a great trans-ocean co-operative enterprise.

Some of the mill's special character may be due to its workers having been for so long an unusually united family. Seventy per cent of the employees have been there fifteen years, and a large number for twenty-five. Many of them live in the town of Liverpool, just across the bay, a place of old-world charm which has just celebrated its 200th birthday. Everyone knows where everyone lives, and who his father was and where his father lived. Against the Nova Scotian background, this kind of neighbourly intimacy makes for harmony.

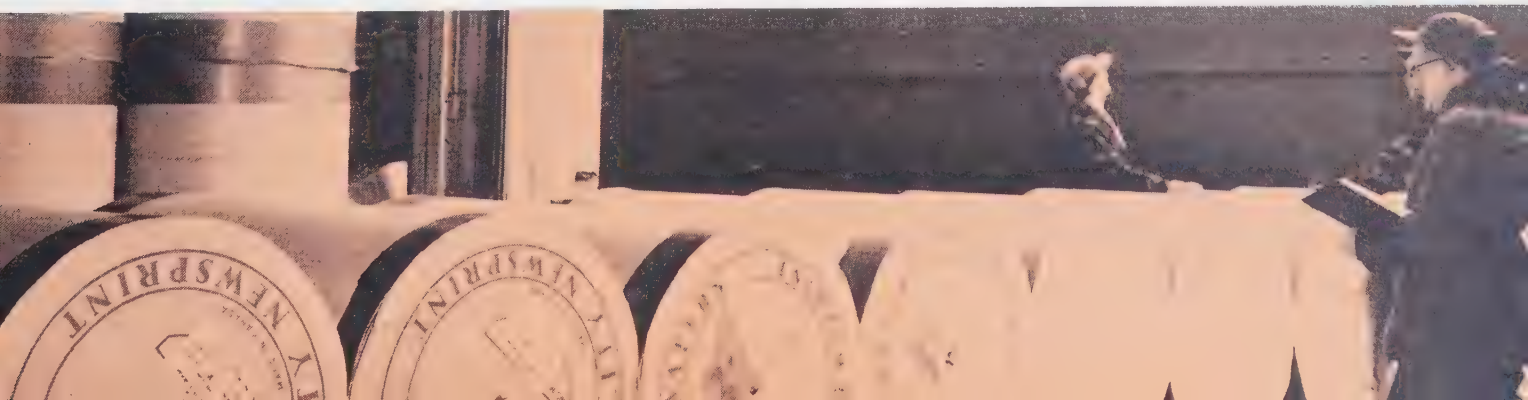
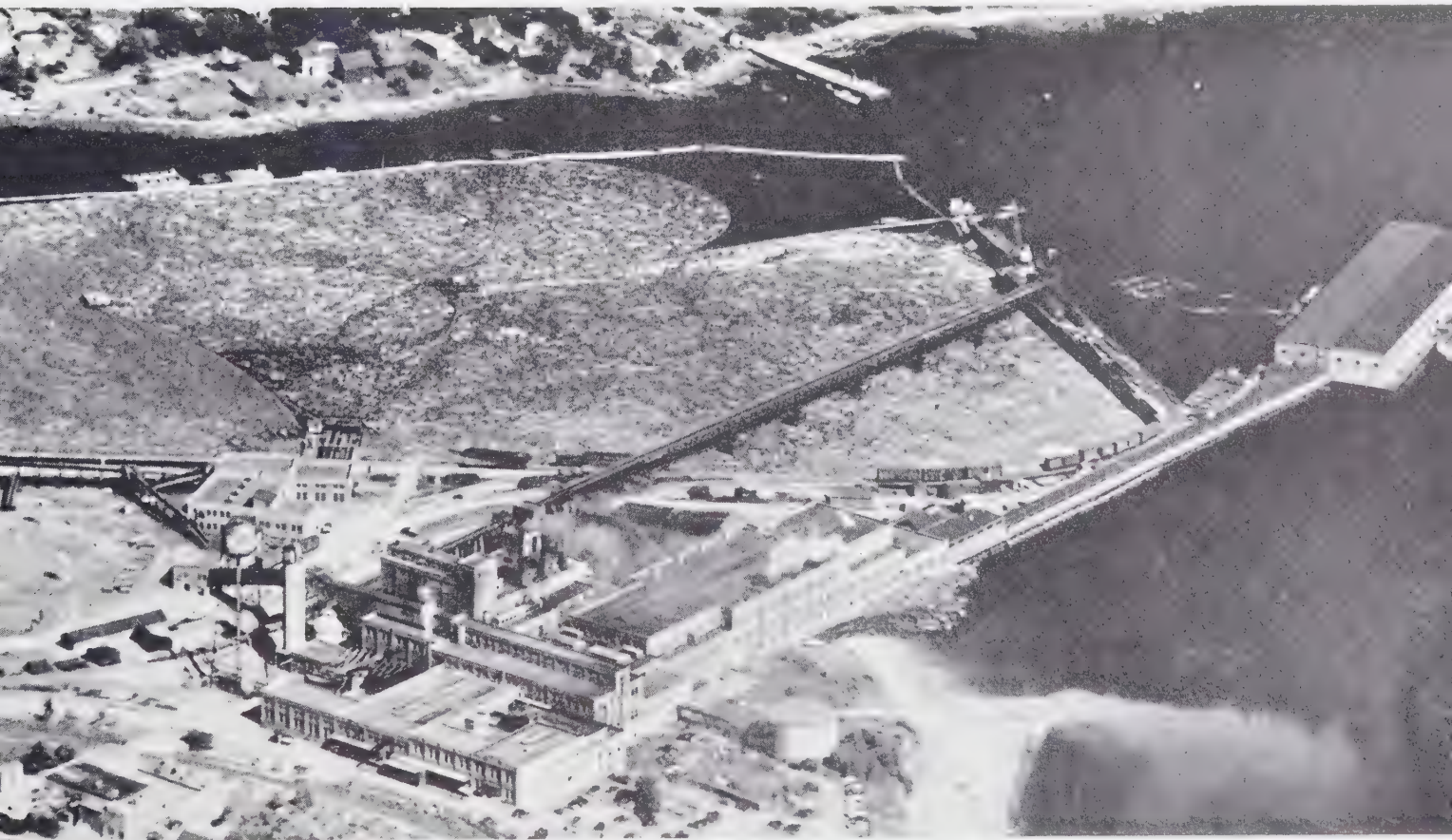
The people of the Province look back on a long and proud history, and on successive waves of settlement. The village names of French Village, West Berlin, West Dublin and Caledonia tell their own story. Today a quiet, reserved people, who live an orderly and comfortable life, flourish in the South Shore towns. Their biggest single industry is the pulp and paper mill and its extensive wood operations. Some 4,000 farmers sell wood to the mill in a year. Although the Province's woodlands are conserved by natural regeneration, Bowaters is setting up a tree nursery to encourage tree farming. Pulpwood in the company's own extensive lands is cut by loggers working in camps but, in contrast with parts of Newfoundland, the good roads and smaller distances of Nova Scotia enable the men to get home at week-ends.

Many men, some with families, live a simple and serene life serving the woods department. One spends his time by the side of a peaceful lake, watching the trout, guessing where a busy loon (a kind of grebe) will come up after each dive, and all the time shrewdly directing the raising of logs from the water by jackladder so that they can be trucked to another watershed. Another man runs a centre where trucks dump their logs into a barge; he and his family live amid an idyllic landscape. In a logging camp the cook is free to take his rod and fish when he has half an hour to spare. On the bank of a stream a nimble young man with a high-pressure hose 'shoots' logs into the claws of a conveyor.

Bowaters Mersey Paper Mill, overlooking Liverpool Bay, produces 500 tons of newsprint daily, much of it destined for leading American newspapers. Other newsprint travels—in Bowater ships—as far afield as Britain and New Zealand.

Nothing ever dismays Nova Scotians. Thirty years ago they suffered from unemployment, so they set up a hydro-electric power system that enabled Isaac Walton Killam, a Nova Scotian who had begun by selling newspapers and soon became a millionaire, to come back to his native province and start the Mersey paper mill. Soon afterwards a big fire destroyed many of Liverpool's wooden houses, so the people built a new and bigger Liverpool. Some years ago a devastating hurricane which had swept across the United States blew down millions of trees near the Mersey mills. So, rather than modify their wood-cutting operations, on which many employees were dependent, the company started an export lumber business which has continued to thrive.

If you wander through the woods in summer and pick your way through the giant hemlocks, some of them two hundred years old, you will find an occasional clearing that betrays the path of the hurricane. "Oh, you mean the big wind," the logger will say, stopping to refill the fuel tank of his power-saw. "Well, it didn't do us any harm."





Sales and sailors

Four men carry, at the highest level, the responsibility for selling in North America nearly a million tons of newsprint a year, three-quarters of Bowaters' world output. Their office is on Park Avenue, New York, but their chairs are often empty, for the competitive selling of newsprint is not a sit-in-the-office job.

To sell newsprint is not to sell rolls of paper. It is to deliver at a newspaper pressroom undamaged and ready-to-use rolls suited to its machines and machine-crews, in time for every edition from one year's end to the next, regardless of weather, transit loss, traffic delay, accidents, strikes, national holidays or any other cause. You can build a papermill in a couple of years. But Bowaters' New York sales office has been forty years building up its customer relations.

Here is the log-book of a typical day of the New York sales company personnel:

The President of the sales company—who first came to Bowaters as a keen sales cub thirty-six years ago—is in Montreal at a directors' meeting of the Bowater Corporation of North America.

One Vice-President is in the New York office, directing the sales company's affairs.

Another is in St. Louis, Missouri, seeing a new customer about first deliveries.

A sales representative of the New York office is soliciting a new account in Cleveland, Ohio.

The company also has four salesmen permanently based at Atlanta, Georgia, and on this same day they are visiting local papers at Amarillo, Texas; Shreveport, Louisiana; Miami, Florida; and Nashville, Tennessee.

The sales force's service specialists are discussing technical problems in printing offices in Baltimore, Maryland, and Atlanta, Georgia, and a third is at the Mersey Mills in Nova Scotia. Transportation inspectors are at unloading docks in New York, Philadelphia and Jacksonville, Florida.

In the midst of a network of telephones at Park Avenue is a Newfoundlander in charge of the traffic department, a quick-thinking trouble-shooter who will tackle anything from a dock fire or a derailed train to a week-long blizzard.

The result of all this? In the course of a year the typists on the eleventh floor at Park Avenue type out invoices for some hundred million dollars.

The crew of the Nantucket Lightship could set their watches by the passing Bowater vessels.

The Bowater crews, for their part, are often delighted to see the Nantucket Lightship. Tired officers will leave the bridge of the *Margaret Bowater* after a sleepless day and night in the foggy forties as their ship at last breaks out of dense fog into brilliant sunshine and a clear horizon ahead. The radar screen slightly to starboard of the wheel is switched off after hours of non-stop work. The young English captain strides straight from the bridge into his spacious dayroom and begins typing out his report on his desk, facing the photographs of his family.

This model newsprint ship heads into New York harbour, where a clear berth awaits her. Every two weeks throughout the year, winter and summer, a Bowater ship moors in New York on the same day and usually at the same time, and unloads paper before steaming off South to other regular ports.

Low-cost water shipment is part of the Organisation's world policy. "Ships are vital to Bowaters," the Chairman said a few years ago, and much newsprint and raw material is carried in the Organisation's own ships. A great deal of newsprint from Corner Brook travels to the heart of North America through the new St. Lawrence Seaway to the Great Lakes, and on to the populous northern cities of the United States. Other ships carry frequent cargoes down the United States coast to New York, Philadelphia, Baltimore, Washington and other big newspaper centres.





Powater ships ply the world's oceans : from the southern port of Charleston with pulp for the Bowater mills in the United Kingdom, from Corner Brook with newsprint for many lands. The crews become familiar with famous landmarks like Sydney Harbour Bridge; they learn to negotiate the locks of the new St. Lawrence Seaway.





Nearly a million tons of newsprint yearly are sold by Bowaters' North American sales organisation.

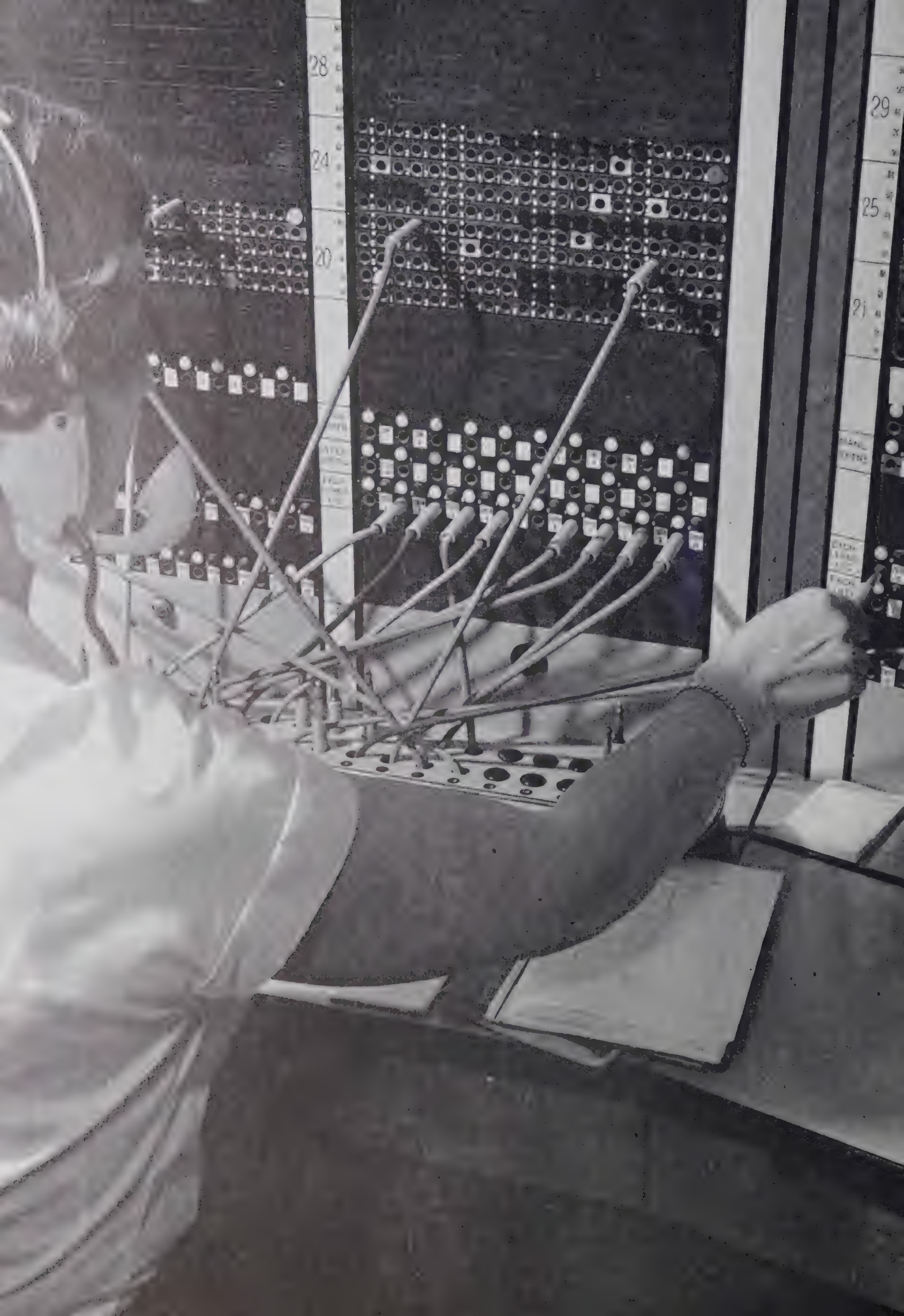
Bowater ships also carry quantities of the newsprint, dried pulp and logs which cross the Atlantic to the United Kingdom from Newfoundland in the North and Charleston, South Carolina, in the South, a great industrial port of growing importance. They link the North American and United Kingdom mills with the newsprint markets of continental Europe, South Africa, India, Australia and New Zealand.

Sea operations of this magnitude could not be left to the economic hazards of the ocean freight market, particularly when punctual delivery is essential, and the Organisation, besides chartering many vessels, runs its own fully-owned shipping fleets, one based in the United Kingdom and one in Canada. In the last few years eight new Bowater vessels, specially designed for paper and pulp, have been launched to replace older ones.

As the *Margaret Bowater* moors beneath the skyscrapers, news bureaus in London, Paris, Bonn, Berlin, Moscow, Rome, Baghdad, Capetown, Canberra, Tokyo and Montreal are flooding the newspaper news desks in the offices round Times Square with the world's news, which millions of citizens will read on the *Margaret Bowater's* newsprint.

And the crew file into the ship's cafeteria for the best cup of tea in the North Atlantic.





A world organisation

The whole of Bowaters' production development in North America outside Newfoundland has taken place in eight years. Its large and gratifying scale should not be allowed to obscure other achievements, of which many men and women who have worked hard for a great part of their lives are very proud indeed.

The most massive plants, all wholly owned, are those in Britain, the United States and Canada. Owned and associated plants also exist in Norway, Sweden, the Irish Republic, Australia, Belgium, France and Italy, and, most recently, in New Zealand, where the Organisation now has a share in the management and development of a well-known pulp and paper company there. There are long-established sales companies in South Africa and Australia, and agencies throughout Asia.

Bowaters mainly produces newsprint. It was a London family firm of paper brokers or merchants when, just over thirty years ago, it decided to manufacture, and built a newsprint mill near London. Within ten years it owned several mills, and was the biggest newsprint producer in the United Kingdom. Just before World War II, as related in these pages, it acquired Corner Brook, and the mill's success paved the way to later growth in North America. Throughout its career the Organisation has resolutely put substantial profits back into the business, believing in debt-free plant and continually modernised equipment.

Since World War II, diversification of products has been an important policy. In Britain, Bowaters has expanded its packaging interests for many years: it now owns fourteen factories making containers and packaging materials, and has recently extended its



Bowaters in North America

Bowater Corporation of North America Limited :
Montreal

In addition to the Carolina pulp mill, three great mills producing newsprint which is sold through the North American sales organisation to 160 cities in nineteen States—much of it carried in Bowaters' own ships

Hardboard mill, scheduled for completion in early 1960

Woods operations extending from Labrador to Mississippi

Power company, serving Western Newfoundland

Other ancillary and service companies

Bowaters in the British Isles

The Bowater Paper Corporation Limited, London

—Headquarters of the Bowater Organisation

Four pulp and paper mills, producing newsprint, magazine papers, other printing and stationery papers, packaging papers and boards

Two mills, producing industrial hardboards and softboards

New factory planned for production of pitch fibre pipe

Fourteen packaging factories producing a comprehensive range of industrial and commercial packaging products

National sales organisation

Shipping fleet, carrying raw materials to Britain and finished products around the world

Ancillary and service companies

Associated company, Bowater-Scott Corporation Limited, producing household tissues, etc.



packaging interests to the European continent. It is also associated with the famous Scott company of Pennsylvania in manufacturing cleansing tissues in Britain, Belgium and Australia. Roll-coated magazine papers are made for the British and export markets, and the newest venture in North America—the production of hardboard—comes after a long and successful experience in this field of manufacture in Europe.



Bowaters in Europe

Two groundwood pulp mills in Scandinavia, supplying pulp for Bowater mills in the United Kingdom

Three packaging factories on the Continent, representing the recent expansion of Bowater interests into the European Common Market area—a vast new potential market of 166 million people

Bowater-Scott Continental S.A., an association of Bowater-Scott with Papeteries de Belgique S.A. in Belgium, for the conversion and marketing of household tissue products in five Common Market countries

Bowaters in South Africa

Bowater Paper Company (Pty.) Limited : Johannesburg

Three sales offices, covering the sale of Bowater products not only within the Union of South Africa but in other parts of the fast developing African continent



Bowaters in Australasia

The Bowater Corporation of Australia : Sydney
Five sales offices, responsible for sales of Bowater products throughout the Commonwealth of Australia

Bowater-Scott Australia Limited, converting and marketing household tissues in Australia (new plant under erection)

Tasman Pulp and Paper Company, New Zealand, of which company Bowaters now has an important share in management and development



Mill



Conversion plant



Associated company plant



Sales company office

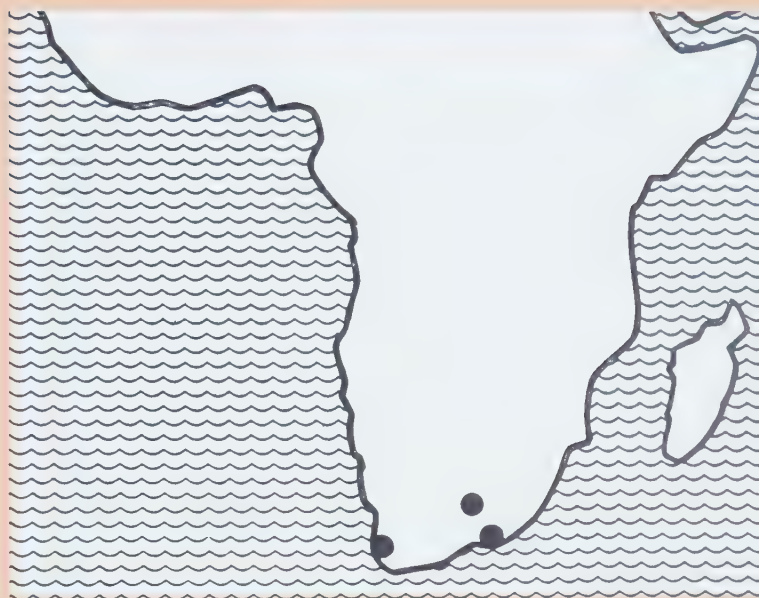


Power company



Steamship company base

In addition to the wholly owned and associated plants shown on these maps, the Bowater Organisation is represented by a network of accredited agents spread throughout the world



So, after a comparatively short manufacturing history, starting with one medium-sized mill, the Organisation now runs thirty production plants (some of them among the largest of their kind) in a number of countries which, with woods and ships, represent fixed assets of almost £140 million sterling. Total North American assets, including net current assets, amounted to nearly 290 million dollars at the end of 1958.

Who owns Bowaters today, and how is it run? It is a multi-national and overwhelmingly English-speaking organisation of some fifty companies. The stock is owned by 48,000 people, mostly in modest investments, and about one-quarter of the investors are in North America. Bowaters is run by Americans in America, Canadians in Canada, Britons in Britain.

At the top of the North American structure is the Bowater Corporation of North America, with offices in Montreal, the financial capital of Canada. This body, a direct subsidiary of the London parent Corporation, handles the financing of all North American enterprises, makes decisions of policy, and provides an administrative clearing-house for all its companies. On its board are representatives of Canada, the United States and Britain, who hammer out the strategy for North American operations with the closest personal knowledge of raw materials resources, of production equipment and productivity, and of the varied and often highly individual marketing characteristics of their vast field. The integration of all that is described in these pages is directed, in the final resort, from a well-used board-room table in this great Canadian city.

The world parent Corporation at Knightsbridge, in London, which has guided the Organisation's growth, consists of men of the United Kingdom, Canada and the United States. It is not a mere holding company: it is a board of experienced technicians, salesmen, financial experts and administrators, which acts as a spearhead for its teams all over the world when a major act of foundation or expansion is called for. And everywhere it encourages the utmost initiative.

So this account of Bowaters in North America ends as it began, with the highlight on initiative and on its companion—success. Within five years of the first American Bowater mill starting up, it was producing one ton in three of all newsprint used in the South between the Rockies and the Atlantic. Now the Catawba pulpmill has started. Tomorrow Catawba's hardboard plant will start. And the day after tomorrow—what? The answer lies in the minds and muscle of young men somewhere in school or college, in mill or woods or office. Somewhere between the Eskimos and Mexico, between ocean and ocean. Somewhere in North America, where Bowaters has put down such firm roots. . . .







